

Appl. No.: 10/033,636
Amdt. Dated: 04/19/2004
Off. Act. Dated: 12/18/2003

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested in view of the foregoing amendments and discussion presented herein.

1. **Allowable Subject Matter**

The Examiner is thanked for indicating that Claim 40 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, Applicant has provided new Claim 47-55. Claim 47 comprises the subject matter of Claims 36, 37, 38 39 and 40. Claims 48 through 55 have similar subject matter to Claims 31-35.

2. **Rejection of Claims under 35 U.S.C. § 102(b).**

Claims 1-5, 10-14, 19-22, 27, 29, 30, 32 were rejected under 35 U.S.C. § 102(b) as being anticipated by Holce (U.S. No. 4,210,899).

(a) **Claims 1, 10, 19 and 27.** Claims 1, 10, 19 and 27 are the independent claims in this application. Each of the independent claims recites a logic circuit that is configured to indicate an alarm condition if a magnetic actuator is moved outside an actuation zone. Such structure is not present in any of the references cited by the Examiner.

All of the patents referenced by the examiner recite magnetically actuated switches (reed switches) that contain bias magnets adhered to the switch bodies that activate the switches to an alarm condition. When in position, the actuation magnets cancel the magnetic fields produced by the bias magnets in the vicinity of the reed switches to leave the reed switches in the inactivated state resulting in a series circuit of inactivated switches (not a logic circuit). In this condition their system is in the secure (non-alarm) state.

In contrast, the design disclosed for illustration in the application contains no bias magnets, and with the actuation magnets in position, the two reed switches affected by the two actuation magnets are activated and the remainder are inactivated creating a true logic circuit. Any alteration of this sequence of Inactivated-activated-inactivated-

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activated-inactivated switches will cause an alarm. The design to eliminates the need for the bias magnets and therefore eliminates significant assembly issues inherent to bias magnet systems while maintaining and improving upon performance of existing schemes.

(1) Claim 1:

Applicant has amended Claim 1 to include the limitations of a logic circuit that is not found in Holce. The Holce patent describes reed switches (40) that contain bias magnets (58), which are adjusted at the factory to barely activate each switch (such that the free end of the reed 48 touches the magnetic fixed contact 50). Then when an actuation magnet (22) is brought into the actuation range, the actuation magnets cancel or balance the magnetic fields created by each bias magnet which is attached to each reed switch allowing the free end each reed (48) to return to the inactivated state and touch the non-magnetic contact (52). The secure state is achieved when all reeds are in the inactivated state and can only be achieved through the use of bias magnets. Holce does not describe a logic circuit as the circuit that is described there is simply a series of three reeds that are closed in the inactivated state. They are inactivated in the presence of the actuation magnets as the actuation magnets cancel the magnetic field of the bias magnets that are adhered to each of the reed switches.

Accordingly, Claim 1 and those claims that depend from Claim 1 recite limitations that are not found in Holce and therefore the claims are not anticipated by that reference.

(2) Claim 10:

In support of the rejection, the Examiner stated that "Holce discloses a magnetic contact apparatus for use with an alarm system comprising a logic circuit to indicate an alarm condition if a magnetic actuator 22 is moved outside an actuation zone..."

Applicant respectfully disagrees that the Holce patent discloses a logic circuit. The circuit described in Holce is simply a series of three reed switches that are closed

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in the inactivated state, not a logic circuit. The reed switches are inactivated in the presence of the actuation magnets as the actuation magnets cancel the magnetic fields of the bias magnets that are adhered to each of his reed switches. This is known as a balanced magnetic switch series circuit in the art. At no point in the Holce patent is the term logic circuit used. A logic circuit is a series of "yes/no" decisions. In the case of a reed switch circuit, "yes" is activated and "no" is inactivated. The disclosed design contains a logic circuit in that the electrical path in the secure state can only be achieved through a precise series on activated and inactivated reed switches. In the embodiment shown in the application, a true logic circuit is shown with a logic sequence of no-yes-no-yes-no. Any other combination would cause an alarm. Accordingly, Claim 10 and Claims 11 through 18 are not anticipated by the Holce reference.

(3) Claim 19:

In support of the rejection of Claim 19, the Examiner states, in part, "Holce discloses a magnetic contact apparatus...comprising a logic circuit, at least five magnetically actuated switches 40..., a magnetic shield 78, at least two of the switches configured to be actuated and complete the logic circuit when a magnetic field is within the activation zone, the circuit configured to be broken if either of the two switches is deactivated or if any of the other switches are activated wherein breaking of the logic circuit is indicative of an alarm condition."

Applicant respectfully disagrees that Holce discloses a logic circuit or that two of the five switches are configured to be actuated by the actuation magnet. Specifically, the Holce patent does not describe a logic circuit, rather it describes a contact where all reed switches specifically contain bias magnets as described above. Holce describes the actuation magnet canceling the magnetic fields produced by the bias magnets returning all 5 reed switches to the inactivated state (Col. 9, lines 4-10). The Applicant does not claim or disclose use of any bias magnets and this is specifically an improvement over the Holce design where each of the bias magnets requires factory adjustment.

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The examiner goes on to state the Holce says that at least two of the at least 5 switches are configured to be activated by the actuation magnet. The Applicant respectfully submits that this statement is incorrect. The main reason why Holce could not have made this claim is that the disclosed design requires that all reeds are activated by the bias magnets and the magnetic fields created by the bias magnets must be cancelled by an equal number of actuating magnets, not just 2. (Col 8, lines 36-40 and Col. 9, lines 4-12 etc.) Consequently, Claim 19, and claims 20 through 26 that depend from that claim, are not anticipated by the Holce reference.

(3) Claim 27:

Applicant respectfully submits that the Holce patent does not disclose a logic circuit or a contact that "has at least two switches that are adapted to be placed in an activated state in response to a magnetic field..." Applicant submits that Holce specifically requires that each reed contain a bias magnet and that the actuation magnet assembly cancel the magnetic fields created by each bias magnet. At no point does the Holce patent define a subset of the total reed switches that must be activated and an additional subset that must be inactivated nor does it describe a logic circuit. When that actuation magnet is in place, 100% of the reed switches (not 2 or 3 of 5) are inactivated closing the switches in the alarm circuit. (Col. 9, lines 4-12 etc). Accordingly, Claim 27 and Claims 28 through 35 are not anticipated by the reference.

As can be seen, therefore, Claims 1, 10, 19 and 27 recite one or more elements which are not found in the Holce reference cited by the Examiner. Accordingly, the Applicant respectfully submits that Claims 1, 10, 19 and 27, as well as the claims which depend therefrom, are not anticipated by Holce.

3. Rejection of Claims under 35 U.S.C. § 103(a).

Claims 6-9, 15-18, 23-26, 28, 31, and 33-35 were rejected under 35 U.S.C. § 103(a) as being obvious over Holce (U.S. No. 4,210,899) in view of Burkett (U.S. No. 5,223,323). Claims 6-9, 15-18, 23-26, 28, 31, 33-35 are dependent claims from Claims 1, 10, 19 and 27. As discussed above, Claims 1, 10, 19 and 27 and do not

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disclose a logic circuit and do not rely on bias switches. Nor would the subject matter of Claims 1, 10, 19 and 27 be obvious to a person having ordinary skill in the art in view of Holce, Burkett or Gordon-Leavitt, singly or in combination. Neither reference cited by the Examiner, nor the combination thereof, suggests, teaches or provides motivation for a logic circuit as recited in the Applicant's claims or the elimination of biasing magnets. Since the independent claims have been shown to be allowable, Claims 6-9, 15-18, 23-26, 28, 31, and 33-35 should likewise be allowable.

(a) Claims 6-7, 15-16, 23-24, 31 and 33:

In support of the rejection the Examiner stated that Burkett teaches "[a]t least two switches being placed in a position outside of predetermined flux density and not being actuated by the field and three switches at each end of the row being actuated when the actuator unit is placed in proximity of the switches and the middle switch remaining in a deactivated state."

The Applicant respectfully disagrees that the combination of Holce and Burkett recited by the Examiner alone or in combination discloses the invention as claimed. In particular, the combination does not disclose, *inter alia*:

- 1) A logic circuit;
- 2) a middle switch remaining in a deactivated state when the actuator is placed in proximity to the switches; or
- 3) Exposure to a magnetic field of predetermined flux density deactivates (rather than activates) at least two switches.

The Holce reeds contain biased magnets and all are inactivated in the presence of the actuation magnets. Figures 3 and 5 of Holce clearly show three magnets, one for each of the three reed switches. In no instance does Holce describe or show a reed switch that is not paired up with an actuation magnet. Nor does it provide any motivation not to pair up the magnets.

In the Burkett patent, the two reeds (S1, S3) that are being affected by the actuation magnets also contain bias magnets and are rendered inactivated by the

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presence of the actuation magnets. The other two reed switches (S2, S4) are non-magnetically biased. (Col. 5, lines 58-63). At Col. 8, lines 25-30 of Burkett it states: "When the system is activated (e.g., switches S1-S4 are in closed states); the signal at terminal 13 passes through switches S1-S4 into the gate of triac Q1." All of the switches affected by the actuation magnets contain biasing magnets. At Col. 7, lines 59-69 of Burkett it states:

"The two magnetic fields emitted from the actuator magnets 20 and 22, actuate switches S3 and S1 into closed positions, similar to S4 and S2. Since both magnets 20 and 22 are sufficiently spaced from switches S2 and S4, both S2 and S4 remain closed. All four reed switches are thereby closed, coupling input terminal 13 to return terminal 14."

At Col. 8, lines 10-15, of Burkett it states:

"A magnet positioned...to overcome the magnetic fields of both biasing magnets 16 and 18 must also impose a magnetic field over switches S2 and S4. Thus either or both switches S2 and S4 actuate to an open state removing the signal from terminal 13."

Accordingly, it can be seen that neither the Burkett nor the Holce patents disclose a logic circuit. The primary difference with the function of the Burkett apparatus and the Holce apparatus is that the Burkett apparatus has two non-magnetically biased switches rather than magnetically biased switches. Applicant also does not disclose or claim biasing magnets.

(b) Claims 6-7, 9, 15-16, 18, 23-24, 26, 31, 33 and 35:

The Examiner states that it would have been obvious to modify the combination of Holce and Burkett to "include a switch being placed in parallel with the switches at each end of the row of the apparatus of Holce as taught by Burkett for the purposes of activating selected switches as desired."

Applicant respectfully disagrees. There is nothing in Burkett or Holce that would provide any suggestion, incentive or motivation to place switches in parallel with the two switches that are activated by the actuation magnet as claimed. In part, it is the

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addition of these two switches that are parallel to the two switches that are activated by the actuation magnet that makes it possible for the elimination of the bias magnets. The elimination of the bias magnets and the elimination of the laborious and error prone factory adjustment of the bias magnets represents an improvement over the art along with the improved actuation zone that can be achieved.

However, Applicant submits that there is insufficient motivation to combine the teachings of Holce and Burkett. That is, we do not think there is a suggestion or incentive within the references to combine the teachings, and that the Examiner has relied upon hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

(c) Claim 28:

Applicant respectfully disagrees that all of the subject matter of Claim 27 is disclosed in Holce. As described above, neither Holce nor Burkett describe a logic circuit. Both patents describe simply a series of three or four reeds that are closed in the inactivated state. The switches are inactivated in the presence of the actuation magnets as the actuation magnets cancel the magnetic field of the bias magnets that are mounted to each of the reed switches. Applicant also respectfully disagrees that Burkett teaches "completing a circuit whenever two switches are activated by the actuator unit and the remaining switches are in the deactivated condition (fig.3)." In fact the opposite is true and all switches are deactivated when the actuator magnet is put in place as discussed above. The Burkett FIG. 3 does not have actuator 10 in place.

d) Claims 36-39 and 41-44:

Claims 36-39 and 41-44 were rejected under 35 U.S.C. § 103(a) as being obvious over Holce (U.S. No. 4,210,899) in view of Gordon-Levitt (U.S. No. 6,400,267). The arguments pertaining to the disclosure of the Holce patent stated above also applies equally to these claims. Accordingly, since independent Claim 36 has been shown to be patentable, Claims 36-39 and 41-44 should likewise be patentable.

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In addition, the "anti-tamper" switch that is referred to in Gordon-Levitt to identify tampering with the unit is a spring 116. At Col.5, lines 15-25 it states:

"Another anti-tamper switch 114 may be employed to detect an attempt to tamper with the alarm by removing the top side 104 of the enclosure. The switch 114 is mounted on board 112, and includes a means of sensing when the top side of the alarm enclosure is removed. A spring 116 which is compressed when the top side is in place may be used to actuate and de-actuate switch 114. The alarm's monitoring circuitry is arranged to detect the de-actuation of switch 114 and to trigger the alarm when so detected."

Accordingly, Applicant submits that Claims 36-39 and 41-44 claim limitations that are not found in the combination recited by the Examiner. Therefore Claims 36-39 and 41-44 recite structure which is patentable over the cited references for purposes of 35 U.S.C. § 103.

4. Conclusion.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

The Applicant also respectfully requests a telephone interview with the Examiner in the event that there are questions regarding this response, or if the next action on the merits is not an allowance of all pending claims.

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Respectfully submitted,


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